

Environmental Assessment Review Secretariat.  
22<sup>nd</sup> floor Place Bell,  
160 Elgin St.,  
Ottawa,  
Ontario.  
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Dear Sir/Madam.

**Re: Review of the Canadian Environmental Assessment process.**

Thank you for the opportunity to comment on this review.

1) The use of models in the assessment process often provide unreliable or biased results because they are, unreliable used outside of their constraints and/or the data is inadequate. The assumptions and resulting uncertainties are not made clear and alternative conclusions are not provided.

For example input-output economic models of a project result in unsubstantiated claims about the job and cash benefits of a project. These claims that are based on dubious assumptions, such as a multiplier effect, which are not fully available for scrutiny or backed by real world data.

Hydrological models are simplification of a complex system. Their use is subject to many constraints. The data and use of the models often does not satisfy these constraints.

2) The owner of a large environmental services company told me that environmental consultants can only do what the client wants, not what science demands. Unfortunately, during the assessment office's review of the resulting application they default to the law not science to evaluate the resulting application. Many environmental assessment are simply paper exercises that avoid the hard questions (See below). The claim of a science based process is greatly exaggerated.

3) In making a risk evaluation a probability of failure and a significance of such a failure are estimated. In estimating the significance the impact on social values is usually left out. This is a serious oversight. For example, a risk evaluation might establish that the significance of a project's impact on a salmon population is low. However, if the social value of the salmon (its importance to those who value the salmon for non-biological or non-economic reasons) is considered then the overall significance of the risk would be much higher. This analysis is not usually included in the assessment.

4) In the same vain, an evaluation usually considers the cumulative economic impacts of a project but it is easily biased, see item 1 example 1. The cumulative environmental impacts are evaluated but usually over a short period into the future using too short a baseline (usually not more than 2 years). The cumulative social (this is not the same as economic) impacts are not evaluated in any meaningful manner. Overall this biases the review of the assessment in favour of the project proceeding.

5) The assigning of energy assessments to the NEB, for example, devalues the assessment process because of conflict of interest. The NEB becomes responsible for both promoting energy development and protecting society from them. This is one reason why the Fukushima Daiichi explosion occurred: Nuclear safety was assigned to the same ministry as nuclear promotion. An independent environmental assessment body is essential if the process is to have any meaning or credibility.

6) A rigorous, system for the long term monitoring of any assessment conditions is critical.

Sincerely,

John Knight